

## **ABSTRACT**

Embodiments of the invention may further provide a method for adjusting the granularity of a network analysis sample while maintaining validity. The method includes calculating states for each device in the network for a first number of predetermined equal intervals within a first sample window, selecting a second sample window that is smaller than the first sample window, selecting a second predetermined number of equal intervals for the second sample window, and determining an interval from the first number of predetermined intervals that immediately precedes an initial interval of the second predetermined number of equal intervals. The method further includes using the calculated state from the preceding interval to calculate a starting state for the initial interval, and calculating state for each device in the network for each of the second predetermined number of equal intervals.

223448\_1